OPINIONS AND DECLARATIONS RENDERED BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E.

Secretary to the Commission

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OPINION 264

Designation, under the Plenary Powers, of a figure to represent the lectotype of the nominal species *Papilio iris* Linnaeus, 1758 (Class Insecta, Order Lepidoptera)

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INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

COMPOSITION AT THE TIME OF THE ADOPTION OF THE **RULING GIVEN IN OPINION 264**

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OPINION 264

DESIGNATION, UNDER THE PLENARY POWERS, OF A FIGURE TO REPRESENT THE LECTOTYPE OF THE NOMINAL SPECIES "PAPILIO IRIS" LINNAEUS, 1758 (CLASS INSECTA, ORDER LEPIDOPTERA)

- RULING:—(1) Under the Plenary Powers, the illustration given as figure 1 on plate 29 of South (R.), 1906, The Butterflies of the British Isles is hereby designated to represent the lectotype of the nominal species Papilio iris Linnaeus, 1758, and the restricted locality of the nominate subspecies of the foregoing species is to be treated as being "England" (="Anglia" of Linnaeus, 1758).
- (2) A note of the foregoing determination of the above nominal species is to be inserted in the entry in the Official List of Specific Names in Zoology as Name No. 48 of the specific name iris Linnaeus, 1758, as published in the combination Papilio iris, made under the directions given in Opinion 232.
- (3) The specific name *ilia* [Schiffermüller and Denis], 1775, as published in the combination *Papilio ilia*, is hereby placed on the foregoing *Official List* as Name No. 79.

I.—THE STATEMENT OF THE CASE

On 18th March 1945, Dr. A. Steven Corbet (British Museum (Natural History), London) submitted to the International Commission the following preliminary note foreshadowing an application for a ruling under the Plenary Powers that the trivial name iris Linnaeus, 1758, as published in the combination Papilio iris, should be held to apply to the "Purple Emperor" Butterfly which occurs in Europe, including England, and which is habitually known by the specific name iris Linnaeus, 1758, and not to the allied species which occurs in Continental Europe

but not in England and which is habitually known by the specific name *ilia* [Schiffermüller and Denis], 1775¹:—

Request for the use of the Plenary Powers to secure the continued usage in its accustomed sense of the name "iris" Linnaeus, 1758, as published in the combination "Papilio iris"

By A. STEVEN CORBET (British Museum (Natural History), London)

Extract from a letter dated 18th March 1945

I enclose a draft of some notes on *Papilio iris* L., which contains all the relevant information, although I feel sure that it could be put together in a more logical form.

Enclosure to Dr. A. Steven Corbet's letter of 18th March 1945

"Papilio iris" Linnaeus, 1758

When the Linnean Collection was examined in detail by Mr. W. H. T. Tams and myself in 1941 we were impressed by the sound state of preservation of the specimens, by the absence of any evidence suggesting that label-changing had been carried out by Sir James Edward Smith, who acquired the collection after Linnaeus' death, and by the presence of almost all the types which were known to be in the collection originally. To my mind, there is no doubt that the Linnean names should be based on these specimens (to a large extent this is the position which obtains already), and should not rest on selections of "types" by later authors from among the figures and descriptions of previous authors cited by Linnaeus in his descriptions. At the same time, of course, it is necessary to ascertain that these specimens were actually in the Linnean Collection at the time that they were described.

- 2. In the description of *Papilio iris* in *Systema Naturae*, Edition 10, p. 476, Linnaeus cited references to four authors including two figures and gave a detailed description which may refer to *Apatura iris* auctt. or to *A. ilia* (Schiff.); "*Habitat in Quercu Germaniae*, *Angliae etc.* P. Forskål".
- 3. The Linnean Collection has two males labelled "iris" and "110 iris" in Linnean writing and both are A. ilia: there is, in addition, a male of A. iris auctt. without label and (according to Verity) a female of A. ilia, also without a label but both believed to be Linnean. The species was marked in the Linnean copy of Edition 10 as being in the Linnean collection and one of the males labelled

Frequently, this name is incorrectly cited as having been first published in 1776, but in fact it first appeared in 1775.

"iris" should be regarded as the type. Although the description of *iris* in Edition 10 does not differentiate between *iris* auctt. and *ilia* there is a note added to Linnaeus' copy of Edition 10 which made it clear that he was describing A. *ilia* and not A. *iris* auctt. "Primoras supra maculis albis sparsis in media & exterius [et ocello nigro inde ferrugineo]".

4. In view of the confusion which must result from using the name *iris* in its correct sense, there is much to be said for the Commission fixing the name "iris" to A. *iris* auctt. with an arbitrarily selected type locality or designating the specimen of *iris* auctt. in the Linnean Collection as the type. I have no idea as to the provenance of this particular specimen.

II.—THE SUBSEQUENT HISTORY OF THE CASE

2. On the receipt of Dr. Corbet's letter, the problem dealt with in the present *Opinion* was given the Registered Number Z.N.(S.) 184. As soon as practicable thereafter, discussions were started with Dr. Corbet, by Mr. Francis Hemming, Secretary to the Commission, who, as a lepidopterist, was already familiar with the problem involved, the object of these discussions being to settle the precise nature of the request to be submitted to the International Commission and, generally, to finalise Dr. Corbet's application which, as will have been noted (paragraph 1), was submitted only in draft form. These discussions were concluded in the summer of 1945, and on 23rd June of that year, the outcome was formally placed on record by Mr. Hemming in the following paper which was then placed in the Commission's File Z.N.(S.) 184:—

Proposed use of the Plenary Powers to designate the species to be accepted as that represented by the nominal species "Papilio iris" Linnaeus, 1758

By FRANCIS HEMMING (London)

The purpose of the present note is to examine the question of the application of the name *Papilio iris* Linnaeus, 1758 (*Syst. Nat.* (ed. 10) 1:476) and to put forward a proposal for the use by the International Commission of its Plenary Powers for the purpose of securing that this name shall be available for use in its universally accepted sense.

2. The present case is similar in its main outlines to that of the name Papilio podalirius Linnaeus, 1758, which has already been submitted to the International Commission by Dr. A. Steven Corbet and myself, in the sense that an examination of the material preserved in the Linnean collection at Burlington House carried out by Dr. Roger Verity in 1912—1913 showed that this name was correctly applicable not to the species to which it is habitually applied but to an allied species which has always been known by a different name (Verity, 1913, J. linn. Soc. Lond. (Zool.) 32: 180—181). Before examining the present case, it may be convenient to set out the issue in simple terms for the convenience of those zoologists who may be called upon to consider this matter but who are not personnally acquainted with the two species involved. Briefly, the point to be noted is that in the West Palaearctic Region there are two widely distributed species of the genus Apatura Fabricius, 1807, which for the present purpose may be distinguished as Species "A" and Species "B". These species may be separated as follows:-

(1) Species " A ":

This species is most readily recognised by the presence on the upper side at the inner angle of the forewing of a black spot which, by reason of its being surrounded by the dark ground colour, is often barely visible.

This species is widely distributed in Western, Central and Southern Europe. It occurs in England but does not extend as far north as Scandinavia. It is doubtful how far east it occurs; the insect occurring in West China which was formerly regarded as a subspecies of Species "A" is now known to be structurally distinct. This species is known in England as the "Purple Emperor".

(2) Species " B ":

This species can at once be distinguished from Species "A" by the fact that the black spot at the inner angle of the forewing on the upperside is always surrounded by a circle of tawny scales. Moreover, unlike Species "A", Species "B" commonly exhibits marked dimorphism, there are frequently occurring specimens in which the white bands on the upperside are replaced by bands of a yellowish colour.

In Western Europe this species has a distribution not unlike that of Species "A", but it does not extend as far north and is not found in England. It extends, however, much further to the East.

3. Species "A" is habitually known as Apatura iris (Linnaeus, 1758), being identified with Papilio iris Linnaeus, 1758. Species "B" is habitually known as Apatura ilia [Schiffermüller and Denis], 1775, being identified with Papilio ilia ([Schiffermüller and Denis], 1775) (Ankündung syst. Werk. Schmett. wien. Gegend: 172, no. G.2).

- 4. The description given by Linnaeus (1758: 476) for his Papilio iris might apply to either Species "A" or to Species "B". Three of the four bibliographical references cited by Linnaeus are all to Species "A". The fourth (that to Richter) is indeterminate. The locality cited by Linnaeus ("Habitat in Quercu Germaniae, Angliae etc.") certainly applies to Species "A" (by reason of the reference to "Anglia") and may also apply to Species "B". Judged by the foregoing criteria, it would be reasonable to conclude (1) that the nominal species Papilio iris Linnaeus was certainly based upon Species "A" but (2) that, owing to the vagueness of the description and of one of the references cited, Linnaeus might also have had before him specimens of, or may have been referring to, Species "B" when establishing this nominal species but that there is no clear evidence that he did so. On this basis it would be reasonable to conclude that the current universal identification of *Papilio iris* Linnaeus with Species "A" (The Purple Emperor of England) was correct and to treat any elements of Species "B" which may have been included by Linnaeus in this nominal species as having been removed therefrom by Schiffermüller and Denis, the first authors to recognise the distinction between Species "A" and Species "B", when in 1775 they gave the name Papilio ilia to Species "B", thus leaving Species "A in undisputed possession of the name Papilio iris Linnaeus.
- 5. Unfortunately, there are two pieces of evidence which clearly show that such a conclusion would be incorrect. These are: (1) In his own interleaved copy of the Tenth Edition of the Syst. Nat. (now preserved at Burlington House) Linnaeus, as noted by Verity (1913: 180—181), added at the end of the entry for Papilio iris the words "et ocello nigro inde ferrugineo", thus unmistakably identifying Papilio iris with Species "B". (2) The examination of the Linnaen collection at Burlington House, first by Verity (1913: 180) and again, recently, by Dr. Corbet shows conclusively that the Linnaen syntypes of Papilio iris belong to Species "B" and not to Species "A".
- 6. Every lepidopterist will agree that the utmost confusion would arise if it were necessary to transfer the trivial name *iris* Linnaeus from Species "A", the species to which this name has been consistently applied for one hundred and eighty-seven years (i.e. ever since 1758), to the closely allied Species "B", which ever since 1775 has been known by the trivial name *ilia* [Schiffermüller and Denis]. This is a clear case of a transfer of the kind expressly mentioned by the Ninth International Congress of Zoology, Monaco, 1913, as being a peculiarly suitable subject for the use by the International Commission of the Plenary Powers granted to it by that Congress.
- 7. It remains to consider the form which action by the International Commission under its Plenary Powers might most suitably take in the present case. First, it will, I think, be generally agreed that ease of recognition will be promoted if the Commission, in giving directions as to how the nominal species *Papilio iris* Linnaeus, 1758,

is to be interpreted, were to secure that the standard specimen or figure to be used for identifying this species should be a specimen, or a figure of a specimen, obtained in England, for of the two localities cited by Linnaeus for his *Papilio iris* this could only refer to Species "A", since Species "B" does not occur in Great Britain. If we were concerned with a highly plastic species, it would probably be well to define the type locality of this species with greater precision than "England". In that event it might, other things being equal, be convenient to select either the locality given by Ray or that given by Wilkes in the passages cited by Linnaeus, when describing Papilio iris, both of which are quite precise. Ray said of this species: "Julio mense capta est circa Heveningham Castle in Essexia Anno 1695 A.D. Courtman"; Wilkes wrote: "... may be taken in Comb-Wood in Surrey, about Westram [sic] in Kent and in other places". Neither of these localities would, however, prove a very convenient selection at. the present date, for the species has long been extinct both in Essex and in Kent. In the circumstances, it seems to me that the broader indication given by the word "England" will be quite sufficient.

- 8. It will certainly be desirable that, when prescribing the manner in which this nominal species should be interpreted, the International Commission should cite a good modern coloured figure, preferably one published in some inexpensive and easily accessible book. I suggest for consideration that the excellent figure of a male specimen given as figure 1 on plate 29 of Richard South's well-known little book entitled *The Butterflies of the British Isles* published in 1906 would be very suitable for this purpose.
- 9. I accordingly suggest for consideration that the International Commission should use its Plenary Powers to direct that the trivial name *iris* Linnaeus, 1758, as published in the combination *Papilio iris*, shall be held to apply to the species represented by the specimen as figured in the work cited in the immediately preceding paragraph and that the type locality of the nominotypical subspecies of this species shall be held to be "England" (= "Anglia" of Linnaeus, 1758).
- 3. Support received from Mr. N. D. Riley (British Museum (National History), London): On 23rd June 1945, Mr. N. D. Riley (Keeper, Department of Entomology, British Museum (Natural History), London), with whom Mr. Hemming had been in correspondence when preparing the paper reproduced in the immediately preceding paragraph of the present Opinion, stated that he was in full agreement with the application submitted in the present case, adding that, in his view, any other course would inevitably lead to the most serious confusion.
- **4.** Issue of Public Notices: On 14th November 1947 a notice of the possible use by the International Commission on

Zoological Nomenclature of its Plenary Powers for the purpose of determining the identity of the taxonomic species represented by the nominal species *Papilio iris* Linnaeus, 1758, was issued to the serial publications prescribed by the Ninth International Congress of Zoology, Monaco, 1913. The publication of this notice elicited no objection to the action proposed.

III.—THE DECISION OF THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

5. One of the first matters connected with the wording of the Règles to be considered by the International Commission on Zoological Nomenclature at its Session held in Paris in 1948 was the clarification and reform of Article 31, the Article concerned with the designation of holotypes and the selection of lectotypes (Paris Session, 4th Meeting, Conclusion 11) (1950, Bull. zool. Nomencl. 4:73—76)². It was in the light of the conclusions so reached that the present application was considered by the International Commission at the Fourteenth Meeting of its Paris Session held at the Sorbonne in the Amphithéâtre Louis-Liard on Monday, 26th July 1948 at 2030 hours. The following is an extract from the Official Record of the Proceedings of the International Commission, setting out the decision reached by it in this case at the foregoing meeting (Paris Session, 14th Meeting, Conclusion 39) (1950, Bull. zool. Nomencl. 4:540—542):—

THE COMMISSION agreed:—

(1) to use their Plenary Powers to direct that the trivial name *iris* Linnaeus, 1758, as published in the binominal combination *Papilio iris*, should be applied to the species figured as *Apatura iris* by South (R.), 1906, *The Butterflies of the British Isles* as figure 1 on plate 29 and that the type locality of this species, i.e. the type

² Article 31 was further amended by the Fourteenth International Congress of Zoology, Copenhagen, 1953, but the changes then made do not affect the decision taken in the present case. See 1953, Copenhagen Decisions zool. Nomencl.: 72—78.

- locality of the nominotypical subspecies of this species, should be deemed to be "England" ("Anglia" of Linnaeus, 1758);
- (2) that the foregoing definition of the meaning to be applied to the trivial name *iris* Linnaeus, 1758, should be entered against that trivial name, when, in accordance with the decision recorded in Conclusion 16 (6) of the present meeting that name was inscribed on the Official List of Specific Trivial Names in Zoology;
- (3) to place the trivial name *ilia* [Schiffermüller and Denis], 1775, as published in the binominal combination *Papilio ilia*, on the *Official List of Specific Trivial Names in Zoology*;
- (4) to render an *Opinion* recording the decisions specified in (1) to (3) above.
- 6. It should be noted that the only reason why the specific name *iris* Linnaeus, 1758, as published in the combination *Papilio iris*, dealt with in the decision set out in the immediately preceding paragraph was not, in that decision, placed on the *Official List of Specific Names in Zoology* was that this name had already been placed on that *List* under a decision which has since been embodied in *Opinion* 232.
- 7. The following are the original references and localities for the names placed on the *Official List of Specific Names in Zoology* in the Ruling given in the present *Opinion*:—
- ilia, Papilio, [Schiffermüller and Denis], 1775, Ankündung syst. Werk Schmett. wien. Gegend: 172, no. G.2. "Wiener Gegend"
- iris, Papilio, Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 476 "England" (by designation in the present Opinion)
- 8. The decision taken in the present case was reported to, and approved by, the Section on Nomenclature of the Thirteenth International Congress of Zoology, Paris, 1948, at its Sixth Meeting held on Monday, 26th July 1948 (1950, Bull. zool. Nomencl. 5:117).

9. The Ruling given in the present *Opinion* was concurred in by the sixteen (16) Commissioners and Alternate Commissioners present at the Paris Session of the International Commission, namely:—

Beltrán vice Cabrera; Boschma; Bradley; di Caporiacco; Hemming; Hindle vice Jordan; Jorge vice do Amaral; Kirby vice Stoll; Lemche vice Dymond; Mansour vice Hankó; Metcalf vice Peters; Riley vice Calman; Rode; Spärck vice Mortensen; van Straelen vice Richter; Usinger vice Vokes.

- 10. The ruling given in the present *Opinion* was dissented from by no Commissioner or Alternate Commissioner present at the Paris Session.
- 11. At the time of the adoption of the Ruling given in the present *Opinion*, the expression prescribed for the second portion of the binomen which constitutes the scientific name of a species was the expression "trivial name" and the *Official List* reserved for recording such names was styled the *Official List of Specific Trivial Names in Zoology*, the word "trivial" appearing also in the title of the Official Index reserved for recording rejected and invalid names of this category. Under a decision taken by the Fourteenth International Congress of Zoology, Copenhagen, 1953, the expression "specific name" was substituted for the expression "trivial name" and corresponding changes were made in the titles of the *Official List* and *Official Index* of such names (1953), *Copenhagen Decisions zool. Nomencl.*: 21). The changes in terminology so adopted have been incorporated in the Ruling given in the present *Opinion*.
- 12. It must be noted also that at the time when the Ruling given in the present *Opinion* was adopted by the International Commission, the expression prescribed to denote, in the case of polytypic species, the subspecies upon which the nominal species concerned was originally based was the expression "nominotypical subspecies" (Paris Session, 7th Meeting, Conclusion 2) (1950, *Bull. zool. Nomencl.* 4:191), but that at its meeting held at Copenhagen in 1953 the Fourteenth International Congress of Zoology decided to substitute for the foregoing expression the

expression "nominate subspecies" (1953, Copenhagen Decisions zool. Nomencl.: 21). The change in terminology so adopted has been incorporated in the Ruling given in the present Opinion.

- 13. The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.
- 14. The present *Opinion* shall be known as *Opinion* Two Hundred and Sixty-Four (264) of the International Commission on Zoological Nomenclature.

DONE in London, this Fourth day of January, Nineteen Hundred and Fifty-Four.

Secretary to the International Commission on Zoological Nomenclature

FRANCIS HEMMING